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(71) Applicant (for all designated States except US): GRAM A/S
[DK/DK]; Aage Grams Vej 1, DK-6500 Vejens (DK).

(72) Inventor; and

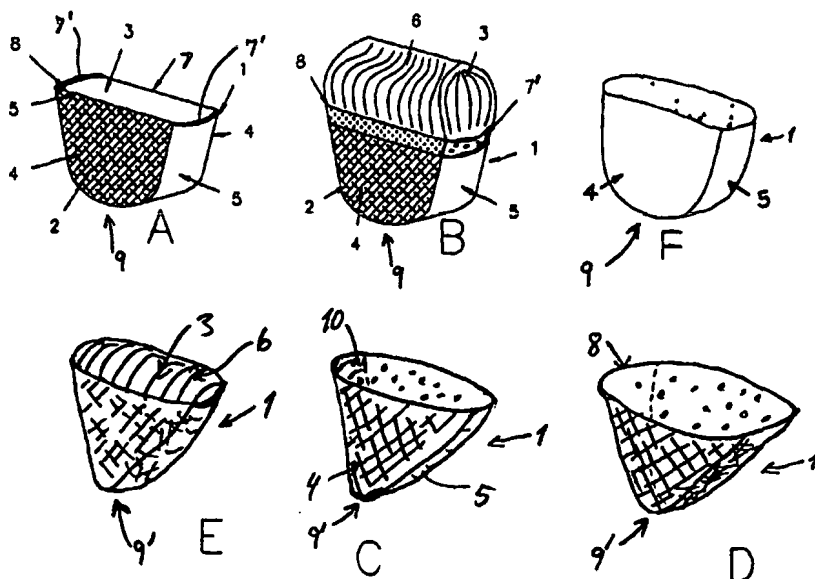
(75) Inventor/Applicant (for US only): GRIGOLI, Franco [IT/IT];
Via Fabio Filzi, 37, I-20032 Cornano (IT).(74) Agent: PATRADE A/S; Store Torv 1, DK-8000 Aarhus C
(DK).

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(54) Title: A FOOD PRODUCT COMPRISING A WAFER, WHICH CONTAINS A FOOD CORE, AND A METHOD OF PRODUCING THE FOOD PRODUCT



(57) Abstract

A food product (1) is described. It consists of a fan-shaped wafer (2) and a food core (3). The two opposed lateral walls (4) of the wafer are substantially parallel and are connected via narrow transverse walls (5). The food core is preferably made from ice cream. It is easy to bite off the food core and there is a good retention of the food core within the wafer. There is also disclosed a method of producing such food product (1).

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**A FOOD PRODUCT COMPRISING A WAFER, WHICH
CONTAINS A FOOD CORE, AND A METHOD OF PRO-
DUCING THE FOOD PRODUCT**

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The present invention relates to a method of producing a food product comprising a wafer which contains a food core, wherein

- an inner coating is applied to the wafer,
- the wafer is grasped and positioned with the opening directed in a filling direction,
10 preferably upward,
- the food is filled into the wafer, and
- the product formed is subjected to a finishing treatment.

Moreover, the invention relates to a food product comprising a wafer being partly coated and which contains a food core, wherein

- 15 - the wafer is substantially fan-shaped,
- the wafer has a thickness that makes it easy to grasp in the same manner as a fan is grasped,
- the wafer has two opposed fan-shaped lateral walls, each of which has an upper lateral edge adjacent the opening of the wafer and lower lateral edges, which extend
20 downward from each end of the upper lateral edge and which are joined at the bottom of the wafer,
- the lateral walls are mutually joined by transverse walls, which extend along the lower lateral edges of the lateral walls to form a wafer that is closed in the sides,
- the food core is arranged in a fully or partly finished wafer.

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More specifically the invention relates to products in which the food core comprises an ice-cream mass and in which the formed food product is a wafer with ice-cream.

Thus the food core may be formed from other products such as mousse, cheese, vegetables or other foods, which preferably may be supported by the wafer and may be
30 consumed together with the wafer.

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Especially in the ice-cream industry many types of filled food products are known. Thus wafers may be provided with a number of different shapes such as cones, cups, hollow rods, shells or the like. It is most common for these products to be manufactured by forming the wafer and then filling the formed wafer with the desired content.

5

The prior art wafer may be associated with problems, especially for children. If the wafer should have a food core having a certain volume then the cone, the cup or the hollow rod would have a great dimension which makes it difficult to handle. Thus it is difficult to bite off the ice-cream from a large conical ice-cream in the same way as it also will be difficult to bite off the ice-cream which is provided in a cup-shaped wafer. These prior art product types have existed on the market for decades.

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Also shell-shaped products are known in the form of so-called taco shells. Thus it is known to manufacture a wafer having the shape of a taco shell embracing a core of ice-cream. It is known to manufacture the shell beforehand and it is also known to shape the food core and then form the taco shell around the pre-shaped food core.

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However, it is a problem that the food content of a taco shell may be lost from the open sides of the wafer. This provides a poor quality for the food product. This is especially a problem associated with an ice-cream product where a certain melting occurs before the ice is consumed. Such food product will not be suited to contain a viscous ice-cream product, a so-called soft-ice.

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It is the object of the present invention to provide a method for producing a food product of the type mentioned by way of introduction and to provide such food product in which the above drawbacks are remedied by providing a new food product which is easy to handle and which is suited for automatic filling or for manual filling, preferably with an ice-cream mass.

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According to the present invention this is obtained with a food product which is characterised in

- that the upper lateral edges of the lateral walls are substantially straight as seen from the side of the product,
- that the lower lateral edges of the lateral walls are substantially continuously curved and is substantially elliptical or circular in form,
- 5 – that the transverse walls as seen in cross-section has a curved form being substantially elliptical or circular,
- that the opening of the wafer, as seen from above has substantially elliptical end portions and an intermediate portion in which the opposed sides are parallel or curved, and
- 10 – that the food core extends at least to the upper lateral edges.

A method according to the present invention is characterised in that an open fan-shaped wafer is provided which is embodied in such a way

- 15 – that the upper lateral edges of the lateral walls are substantially straight as seen from the side of the product,
- that the lower lateral edges of the lateral walls are substantially continuously curved and is substantially elliptical or circular in form,
- that the transverse walls as seen in cross-section has a curved form being substantially elliptical or circular,
- 20 – that the opening of the wafer, as seen from above has substantially elliptical end portions and an intermediate portion in which the opposed sides are parallel or curved, and
- that the food core extends at least to the upper lateral edges,
- that the wafer during transport is supported at the lower half of the wafer thereby
- 25 leaving an edge area along the opening of the wafer free, which edge area is provided with an outer coating.

30 A food product of this type is very easy to grasp, seeing that the fan-shape may be manufactured with different thickness. Hereby it is possible to obtain a greater or minor volume based on the size of the fan-shaped wafer. Moreover, the product may be manufactured in such a narrow form that it may easily be grasped even by the hand of a child. A secure grip is obtained as the fan-shaped product has curved edges thereby

5 adapting easily to the anatomy of the hand even for a child. As the wafer has a closed fan-shape which solely is open at the upper side, there will be no risk that the foodstuff falls out. In case the foodstuff is ice-cream where a partial melting occurs during the consumption then there will be no risk that melted ice-cream will run out of the wafer.

10 The inner coating provides the wafer with a sufficient resistance for softening due to moisture or due to the influence from the content. The coating, which constitutes an inner moisture barrier will typically be a coating containing fat or a chocolate coating. It will also be possible to provide the wafer with an outer coating if this is necessary to maintain the crispness of the wafer. The coating may be applied with the opening of the wafer facing upwards or downwards.

15 It is possible to manufacture the product by machinery by filling the food product into a wafer, which has been finished/surface coated beforehand. Alternatively, the filling of the foodstuff in itself may comprise a part of the coating of the wafer in case the foodstuff contains a fatty content which hardens on the inner side of the wafer. It is possible to fill the wafer with a food content wherein a part of the components will combine with the surface of the wafer and thereby form a coating.

20 Alternatively, it is also possible to effect an outer coating which totally or partly covers the wafer and the filled-in food product. Such outer coating will be applied to an edge area along the opening of the wafer. Such outer coating will be applied to an edge area along the opening of the wafer. This may e.g. be the case with a chocolate coating for an ice-cream wafer.

25 When producing the food product embodied with characteristics as explained above it is possible to transport the wafer by a support which is engaged at the lower half of the wafer. Accordingly an edge area on the opening is kept free. This is important as the outer coating should not be brought into contact with supporting equipment in form of trays, trippers, jaws etc. If such supporting equipment is brought into contact with coating there would be a risk of malfunctioning. As the wafer is provided with the

bottom part curved in a substantial elliptical or circular form, it is possible to have a secure support even in trays as the centre of gravity would be arranged very low in the wafer product having a rounded bottom part. Accordingly the wafer would be provided in a stable position even if it is only supported in the opening in the tray, which opening has edges being in contact with the lower portion of the wafer

When filling the wafer the applied coating hardens by leaving the wafer for a suitable period of time for the applied coating. This can e.g. be effected during a cooling dependent on the product type used.

The finished wafer with a hardened coating providing a moisture barrier may be filled with the product.

In case the food product is an ice-cream mass, this will preferably be filled into the wafer with time elapse filling. This time elapse filling may establish a finished product which is then subjected to a finishing treatment in form of a freezing. The frozen product may then be packed and be marketed in the same way as other ice-cream products.

Filling may also be effected in other ways. Thus it is possible to form a combination product which optionally comprises a content of juice, jam, chocolate or caramel as inner or outer rippling. It is also possible to fill in two or more types of ice-cream having different colours. As an alternative to time/elapse filling, the filling may also be effected by using extruding which is well known for the filling of wafers, cups and the like.

A bottom filling, e.g. of jam or the like, may be filled before the ice-cream. Moreover, the filling may be combined with a subsequent filling by injection of alternative products, e.g. juice or the like, which are known from so-called pencil filling in other ice-cream products. Moreover, the filling may be finished with special multi nozzles in order to obtain a special decoration effect at the top of the product.

The ice-cream product may be covered with a chocolate based or fat containing coating covering the ice-cream mass and a part of the upper edge area of the wafer. This may, e.g., be obtained by dipping the ice-cream product into chocolate or the like for establishing the outer coating. The coated product may be applied onto a dried granulate, e.g. a dust of nut or the like in the coating still being wet so that the dry granulate is maintained in the coating when this is hardened/dried. The dry granulate may be applied, e.g. by use of a so-called dry-coater which is a known equipment for ice-cream production. Alternatively, it may also be effected by use of a special rubber bellow which squeezes the dry granulate onto the product.

After the filling the product may be subjected to a finishing treatment either by freezing or by cooling in case of a mousse product. The finished product may then be packed in sales packages which are well known for other ice-cream products.

As an alternative to the above industrial automatic filling the ice-cream product may also be produced by manual filling which e.g. is known in connection with soft-ice in a situation where the products are produced at the sales place. In this situation the ice-cream mass, preferably soft-ice, is filled into the wafer by extruding. This extruding establishes the finished product which may be given a finishing treatment by dipping into chocolate or sprinkling with nuts or chocolate or the like.

The product in question is a new and hitherto unknown food product. In this food product it is preferred that the two opposed lateral walls are provided substantially parallel. This renders it impossible to make use of a traditional stacking which is known from conical wafers, cups and the like.

It is possible to produce the wafer having the two lateral walls arranged under a mutual angle in order to establish a partial stacking. Due to the ease of biting in the product it is, however, a limited size of the angle which may be used between the two lateral walls of the food product.

The fan-shaped wafer will be produced with lateral walls running parallel or substantially parallel. This makes it impossible to use a stacking and handling which is known from traditional food products. Accordingly, there are special requirements for transport, storing and handling of the wafer. Thus the wafer must be handled in special
5 handling steps after the manufacture of the wafer in a wafer bakery. The wafer bakery may be provided in immediate connection with a filling operation. However, there will often be a need for transport of the wafers from the wafer manufacturer to the ice-cream factory. During this transport it is necessary that the wafers are packed in a way so that they are protected against transport damages. Especially it has turned out that a
10 wafer having substantially flat parallel walls will have a tendency to collapse during longer time of storing and transport. It is believed that this is due to tensions in the baked product.

The method of producing the food product comprises a handling step in which the
15 wafers are conveyed to the filling operation, preferably grouped into several rows. During this step the wafers are arranged at or in a holder comprising supporting means which at least partially enter into the hollow of the wafer. Hereby the wafer is protected against shock excitations so that it will not break. Simultaneously, it is in an advantageously way possible to overcome the problem with collapsing. As the sup-
20 porting means enter totally or partly into the hollow of the wafer a support is established which prevents the product to collapse even if tensions occur in the wafer's substantially parallel lateral walls. The supporting means may solely be in contact with an edge area of the wafer or enter substantially into the hollow of the wafer in order to support a greater part of the lateral walls and possibly also the transverse
25 walls of the wafer.

When the wafer is conveyed to the filling operation the individual wafer may be grasped from the holder and conveyed to transport means which convey the products through the filling operation and the finishing treatment. In connection with the trans-
30 fer to the transport means the wafer may be turned 180°C if necessary in order to orientate the opening upwards so that they can be filled from above by means of tradi-

tional filling equipment. Alternatively the wafer may remain in the holder during the filling operation and finishing treatment.

5 The transport means which are used for the transport of the wafers through the filling operation will preferably be trays in a tray conveyor or slats in a slat conveyor which is then used to convey the product through the finishing treatment in form of freezing in a freezing tunnel.

10 During the application of the inner coating the wafer may be arranged in the holder which simultaneously is used for the subsequent transport and possibly also the filling. This may be the case when the supporting means which enter into the hollow of the wafer consist of a protruding edge area which is arranged along the opening of the wafer and thereby free the inner of the wafer so that a nozzle from the underside of the holder may spray coating material up through the opening into the inner of the wafer.
15 The wafers may manually be arranged in the holders or by means of automatic transport equipment. It is possible to effect a coating at the wafer manufacturer's or as a pre-treatment step as part of the filling of the wafer.

20 In stead of producing the product by a direct extrusion of ice-cream mass into the wafer it is possible to provide a form stable ice-cream product. Thus it is possible to produce the ice-cream core in freezing pockets which are well known from the manufacture of ice-lolly products. These products may be produced with a mould in such a way that they fit into the wafers. After the ice-cream core is form stable it may be withdrawn from the freezing pocket and transferred to a separate step where it is arranged in the wafers which have been provided with an inner coating.
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With this method it is optional to fill the wafer with the opening orientated upwards or with the opening orientated downwards. Said method makes it possible to produce and ice-cream product in which the core extends a substantial distance outside the wafer.
30

The invention will now be explained in further detail with reference to the schematic drawing, in which

- Fig. 1 shows different embodiments of a food product according to the invention,
- Fig. 2 shows an embodiment of a holder for supporting wafers during the handling and/or possible filling,
- 5 Fig. 3 shows another embodiment of a holder for the wafers,
- Fig. 4 shows a further embodiment of a holder for use when inserting wafers into a transport system,
- Fig. 5 a picture illustrating an embodiment of a method according to the invention,
- 10 Fig. 6 a picture illustrating another embodiment of a method according to the invention,
- Fig. 7 a picture illustrating a further embodiment of a method according to the invention,
- Fig. 8 a picture illustrating further part-operations in a method according to the invention,
- 15 Fig. 9 a picture illustrating a further embodiment of a method according to the invention, and
- Fig. 10 a picture illustrating a further embodiment of a method according to the invention.

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Fig. 1 illustrates different examples of a food product according to the invention in form of ice-cream products. The food product 1 consists of a fan-shaped wafer 2 and a food core 3. The wafer 2 has two opposed substantially parallel lateral walls 4 and a transverse wall 5 connecting the two lateral walls 4.

25

The food products A and B are shown having lateral walls 4 substantially with a partly circular form. The central portion 7 of the upper side edge of the wafer 2 is substantially rectilinear and the end portions 7' have a curvilinear form, e.g. a circular form. The product A has a food core 3 only filling the inner hollow of the wafer 2. The product B has a food core 3 extending substantially outside the wafer 2. Moreover, the product B has an outer coating 6 not only covering the food core but also an edge area 8' along the opening 8 of the wafer.

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In the products C,D and E the wafers 2 are produced with substantially triangular lateral walls 4 as the curve 9' at bottom 9 has a small radius of curvature. Moreover, the product D differs in having lateral walls 4 arranged in planes extending under a mutual angle. Thus the distance between the lateral walls is greater at the opening 8 than at the bottom 9 of the wafer. Due to the ease of biting it is, however, limited how large the angle may be between the two lateral walls 4. The angle between the two lateral walls will preferably be of between 0 and 30°. However, the angle will depend on the size of the wafer 2.

10 The wafers are provided with an inner coating 10 (only illustrated in the product C and D illustrated as empty wafers 2). This coating is a moisture barrier and in the case of an ice-cream product it will typically be formed of chocolate.

15 Product F is a wafer having lateral walls 4 being substantially halfcircular and transverse walls 5 being curved.

The distance between the lateral walls 4 of the wafer 2 may be of between 10 and 50 mm and the wafers may be formed in order to contain a volume in the order of between 20 cm³ and 300 cm³, preferably of between 50 cm³ and 130 cm³.

20 Fig. 2 illustrates a holder 11 in the form of a plate formed of cardboard or plastic or other suitable material and which is provided with a matrix of openings 12 in which the wafers 2 may be arranged. As illustrated in the left hand side of Fig. 2, the wafers 2 are formed having lateral walls 4 arranged under an angle in such a way that certain stacking is possible. By use of the plate-formed holders 11 good protection of the individual wafers 2 during transport and handling is obtained. The holder 11 may be used for fixing the wafers 2 in a matrix during a subsequent filling with possible inner coating and the food core. Alternatively, the wafers may be provided with the inner coating before arranging them in the holders 11.

30 Fig. 3 illustrates another embodiment of a holder 13. The holder 13 comprises a rail 14 having recesses 15 in which the lower part of the wafer 2 is accommodated. At the

opposing side the holder 13 has a protruding supporting means 16 entering partly into the inner 17 of the wafer supporting an edge area 18 of the lateral walls of the wafer. Hereby a collapsing of the wafer is obviated and they will also be protected against shocks and breakage during transport and handling. The holder 13 may be provided
5 with supporting means arranged between holders partly being arranged above each other so that more holders may be stacked upon each other in such a way that the wafers 2 are provided with the lower part in the recess 15 and with the upper edge supported by the supporting means 16 in a holder 13 arranged above.

10 Fig. 4 illustrates a further embodiment of a holder 19. The holder 19 comprises a tube 20 supporting a stack of wafers 2. The holder 20 is intended for use by placing the wafers 2 in transport means 21, preferably a tray conveyor or a slat conveyor which is used to convey the wafers to the subsequent filling. Moreover, the holder 19 comprises a conveying means 22 for individual extracting of wafers 2 from the bottom of
15 the stack of wafers.

As mentioned above the wafers may alternatively be conveyed to the filling operations in a holder 11 or 13. Thus it is possible to convey the wafers in several parallel rows or in one single row to the filling operation and finishing treatment and possible subsequent packing.
20

Figs. 5-9 show different embodiments of the method according to the invention. The different steps, part-operations and elements, used in the method will be denoted with identical reference numbers and, accordingly, they will not be explained in detail in
25 connection with each of the figures.

Fig. 5 shows an embodiment in which the wafers 2 are provided in the holders 11. The holders 11 are arranged on trays 13 in a tray conveyor. The wafers 2 are conveyed in direction of an arrow 24. First they are conveyed to a coating step 25 where by means
30 of nozzles 26 they are provided with an inner coating 10 of chocolate 27 sprayed into the wafers 2. In a subsequent transport section 28 the wafers may be dried or cooled in order to harden the chocolate coating before a filling step 29. In the filling step 29 ice-

cream 30 is filled into the wafers 2 by means of nozzles 31 which form a part of a known time elapse filling system. After the filling the wafers are conveyed into a freezing step 32 in the form of a freezing tunnel. After the freezing the trays are conveyed to a removal step 33 in which the wafers 2/the holders 22 are removed from the tray conveyor and conveyed to a packing step (not shown). The tray conveyor which is an endless chain will then have an empty tray which is ready to be filled with a new holder 11 containing wafers 2.

Fig. 6 illustrates another embodiment in which a conveyor 34 is embodied as a slat conveyor. In the coating step 25 chocolate is sprayed into the wafers 2 which are arranged with the opening turning downwards. After the spraying the wafers are turned in a turning step 35. As the wafers are now provided with the opening facing downwards, surplus chocolate will run off in a chocolate drain 36. By means of a pump 37 chocolate is pumped through a conduit 38 to the nozzles 26.

After the formation of the inner coating 10 the wafers 2 are conveyed to a cooling step 39. After the cooling step the wafers are conveyed to the filling step 29 and further to a freezing step 32. After the freezing step there may applied an outer chocolate coating covering the ice-cream core and the upper portion of the wafer or the products may be conveyed directly to a packing step 40.

Fig. 7 illustrates an alternative embodiment of a part-operation by the method according to the invention. The wafers 2 are arranged with the opening facing downwards on a conveyor 42 which may be a slat conveyor or a conveyor in which the wafers are arranged in holders provided with openings having a turned-up edge area for supporting the wafers by abutting the inner side of the wafers. Accordingly, the conveyor 41 is provided with an opening below each wafer 2. In the coating step 25 the wafers will be provided with a coating by means of a nozzle 42 spraying chocolate into the wafer. Subsequently, surplus chocolate can run off in the drain 36. After the coating the wafer is conveyed through a cooling step 39 and may then be filled in any desired way.

Fig. 8 illustrates a further embodiment of part-operations by the method according to the invention. After the freezing step 32 in which the wafers 2 are arranged with the opening facing upwards, the wafers are conveyed to a turning step 43. The wafers are now provided with the opening facing downwards and may be arranged in modified grasping equipment which in principle is known from the handling of conical wafers. The wafers 2 are conveyed through a dipping step 44 in which the form stable frozen product is dipped into a chocolate bath. Then the product is conveyed through a turning step 45 so that the wafer is again arranged with the opening facing upwards. The product is then conveyed to a finishing treatment step 46 in which the wet chocolate is sprinkled with nuts or the like. The product is then conveyed through a drying to a packing step 40.

Fig. 9 illustrates an embodiment in which an ice-cream mass 47 is extruded into freezing pockets 48 in a freezing apparatus 49. The frozen product is withdrawn from the freezing pocket 49 in a withdrawal station 50 and is conveyed through a withdrawal equipment 51 to a station 52 in which the form-stable frozen product is inserted into a wafer 2 which is provided on a conveyor 53. The ice-cream core 3 is thus made form-stable in a shape adapted to the following insertion into the wafer 2.

Hereby it is possible to produce a food product in which the ice-cream core 3 may extend in substantial distance outside the wafer 2. Moreover, it is possible to produce the ice-cream core 3 with different embodiments as e.g. combination products consisting of juice and ice-cream. After the ice-cream core 3 has been arranged in the wafer 2, the product may be conveyed to a finishing treatment as explained above or to a packing step.

Fig. 9 illustrates an embodiment, which substantially corresponds to that illustrated in fig. 6. However, according to this embodiment, following the freezing step 32, there will be effected a dipping step 44 and a finishing treatment step 46 before the product is conveyed through a drying to a packing step 40. Moreover it is noted that the wafers 2 leave the freezing step 32 with the bottoms facing upwards and accordingly are ready for the dipping step 44 without a turning.

Even though the invention has been explained especially with regard to the production of ice-cream products, it is possible to modify the food product and the method steps and provide the wafer 2 with a different type of food. It will also be possible to replace the freezing step with other forms of treatment, e.g. a heating.

CLAIMS

1. A method of producing a food product comprising a wafer, which contains a food core, wherein
- 5 – an inner coating is applied to the wafer,
- the wafer is grasped and positioned with the opening directed in a filling direction, preferably upward,
- the food is filled into the wafer, and
- 10 – the product formed is subjected to a finishing treatment, characterised in that
- an open fan-shaped wafer is provided which is embodied in such a way
- that the upper lateral edges of the lateral walls are substantially straight as seen from the side of the product,
- that the lower lateral edges of the lateral walls are substantially continuously curved
- 15 and is substantially elliptical or circular in form,
- that the transverse walls as seen in cross-section has a curved form being substantially elliptical or circular,
- that the opening of the wafer, as seen from above has substantially elliptical end portions and an intermediate portion in which the opposed sides are parallel or
- 20 curved, and
- that the food core extends at least to the upper lateral edges,
- that the wafer during transport is supported at the lower half of the wafer thereby leaving an edge area along the opening of the wafer free, which edge area is provided with an outer coating.
- 25
2. A method according to claim 1, characterised in that
- the food is an ice-cream mass, which is filled into the wafer.
3. A method according to claim 1 or 2, characterised in that
- 30 – the finishing treatment comprises freezing.

4. A method according to any one of the preceding claims, characterised in that
- the wafers are conveyed to the filling operation in groups, preferably grouped into several rows,
- 5 – the wafers are grasped and transferred to transport means, preferably trays in a tray conveyor or slats in a slat conveyor, which are used for carrying the products through the filling operation and the finishing treatment.
-
- 10 5. A method according to any one of the preceding claims, characterised in that
- the wafers are positioned over supporting means, which enter into the hollow of the wafer and support against the inner side of the wafer or at least against the edge area of the lateral walls delimiting the opening of the wafer.
- 15 6. A method according to any one of the preceding claims, characterised in that
- the wafers are coated internally with the opening orientated downward, the coating material being sprayed up inside the wafer.
- 20 7. A food product comprising a wafer being partly coated and which contains a food core, wherein
- the wafer is substantially fan-shaped,
 - the wafer has a thickness that makes it easy to grasp in the same manner as a fan is grasped,
- 25 – the wafer has two opposed fan-shaped lateral walls, each of which has an upper lateral edge adjacent the opening of the wafer and lower lateral edges, which extend downward from each end of the upper lateral edge and which are joined at the bottom of the wafer,
- 30 – the lateral walls are mutually joined by transverse walls, which extend along the lower lateral edges of the lateral walls to form a wafer that is closed in the sides,
- the food core is arranged in a fully or partly finished wafer, characterised in

- that the upper lateral edges of the lateral walls are substantially straight as seen from the side of the product,
- that the lower lateral edges of the lateral walls are substantially continuously curved and is substantially elliptical or circular in form,
- 5 – that the transverse walls as seen in cross-section has a curved form being substantially elliptical or circular,
- that the opening of the wafer, as seen from above has substantially elliptical end portions and an intermediate portion in which the opposed sides are parallel or curved, and
- 10 – that the food core extends at least to the upper lateral edges.

8. A food product according to claim 7, characterised in that the food core extends upward beyond the upper lateral edges.

- 15 9. A food product according to claim 7 or 8, characterised in that the inner side of the wafer is provided with a protective coating.

10. A food product according to any one of claims 7 to 9, characterised in that the food core is an ice-cream.

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11. A food product according to any one of claims 7 to 10, characterised in that the two lateral walls of the wafer are substantially parallel and are arranged at a mutual distance of between 10 and 50 mm.

- 25 12 A food product according to any one of claims 7 to 11, characterised in that the wafer has a volume in the order of between 20 cm^3 and 300 cm^3 .

13. A food product according to any one of claims 7 to 12, characterised in that the lateral walls of the wafer have a curviform shape, preferably substantially in the form of a segment of a circle, and that the transverse walls have a corresponding curviform extension.

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14. A food product according to any one of claims 7 to 13, characterised in that the upper edges of the lateral walls are rectilinear.
- 5 15. A food product according to any one of claims 7 to 14, characterised in that the upper edge areas of the lateral walls and of the transverse walls are provided with a protective coating on the outer and inner sides.
- 10 16. A food product according to any one of claims 7 to 15, characterised in that the outer side of the wafer is partly or completely covered by a surface coating in the form of a vegetable oil, preferably a cocoa product, which is applied after positioning of the food core in the wafer.

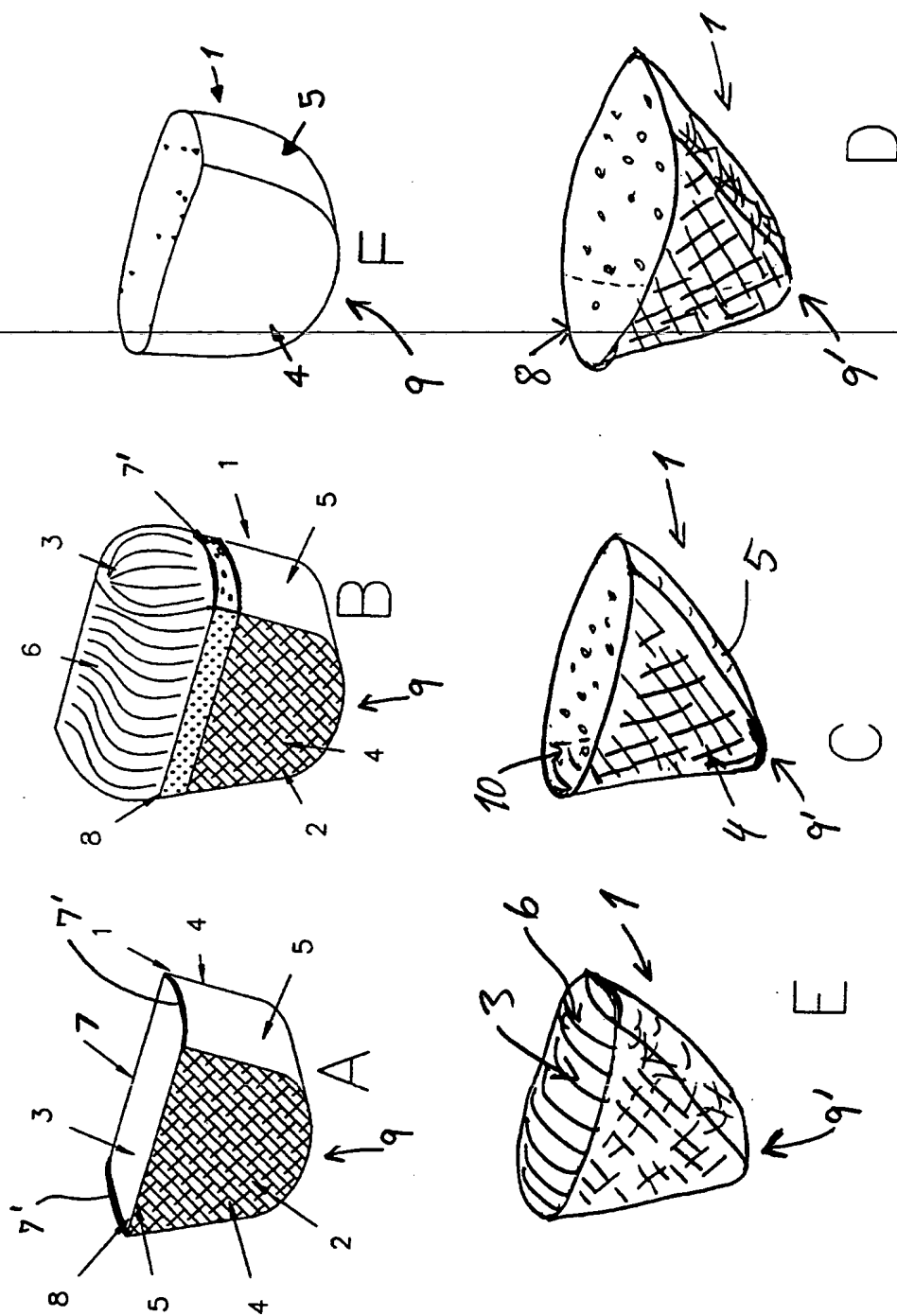


FIG. 1

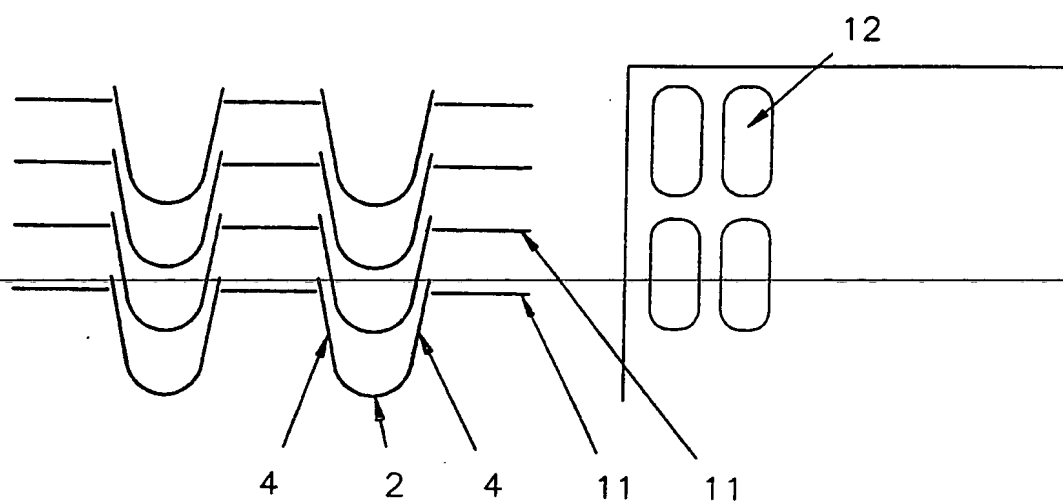


FIG. 2

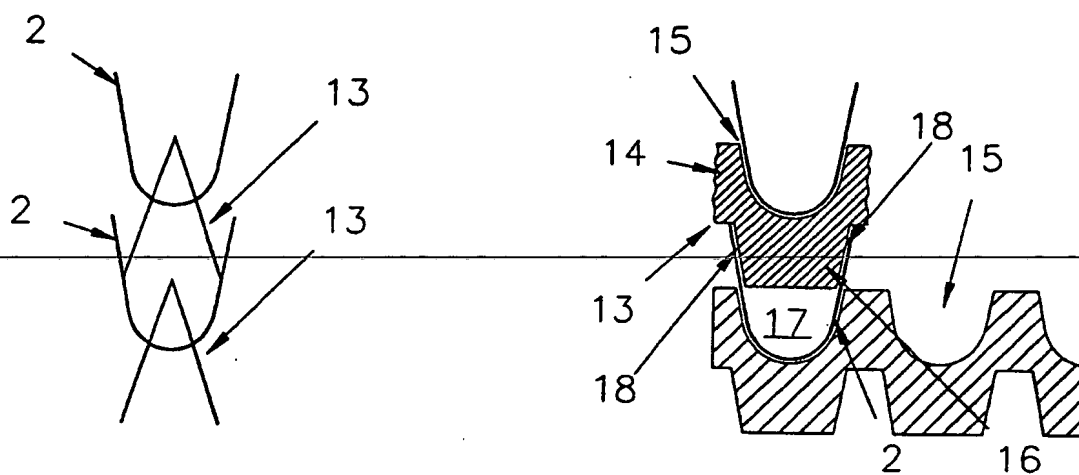


FIG. 3

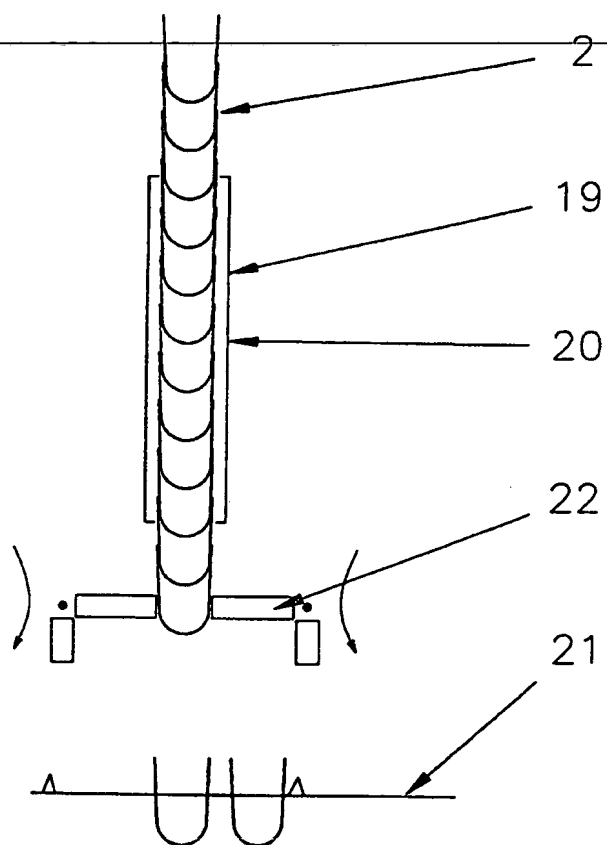
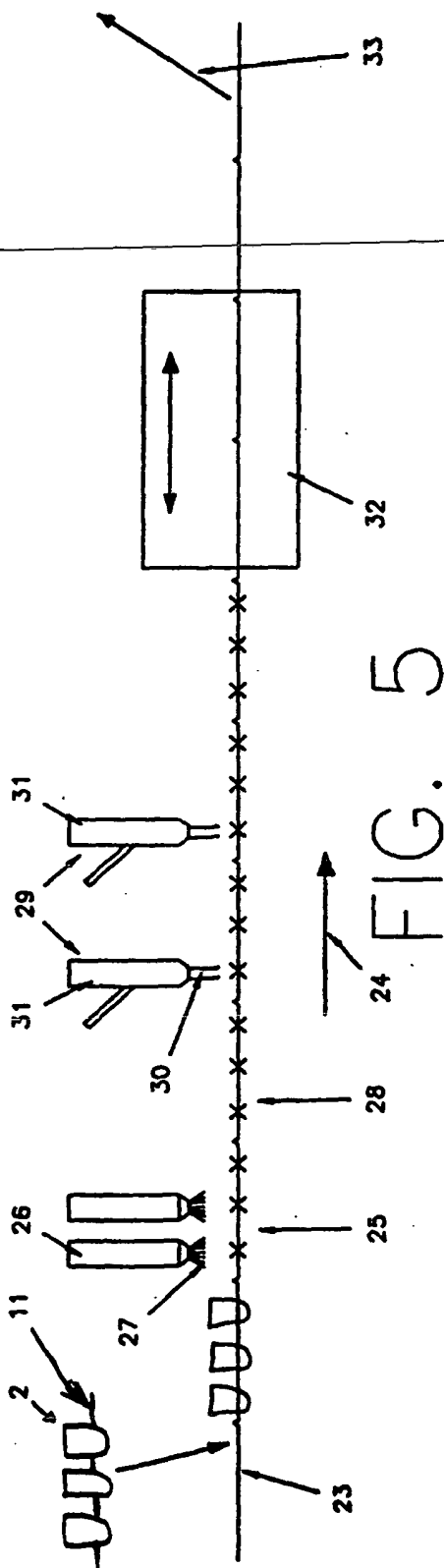


FIG. 4



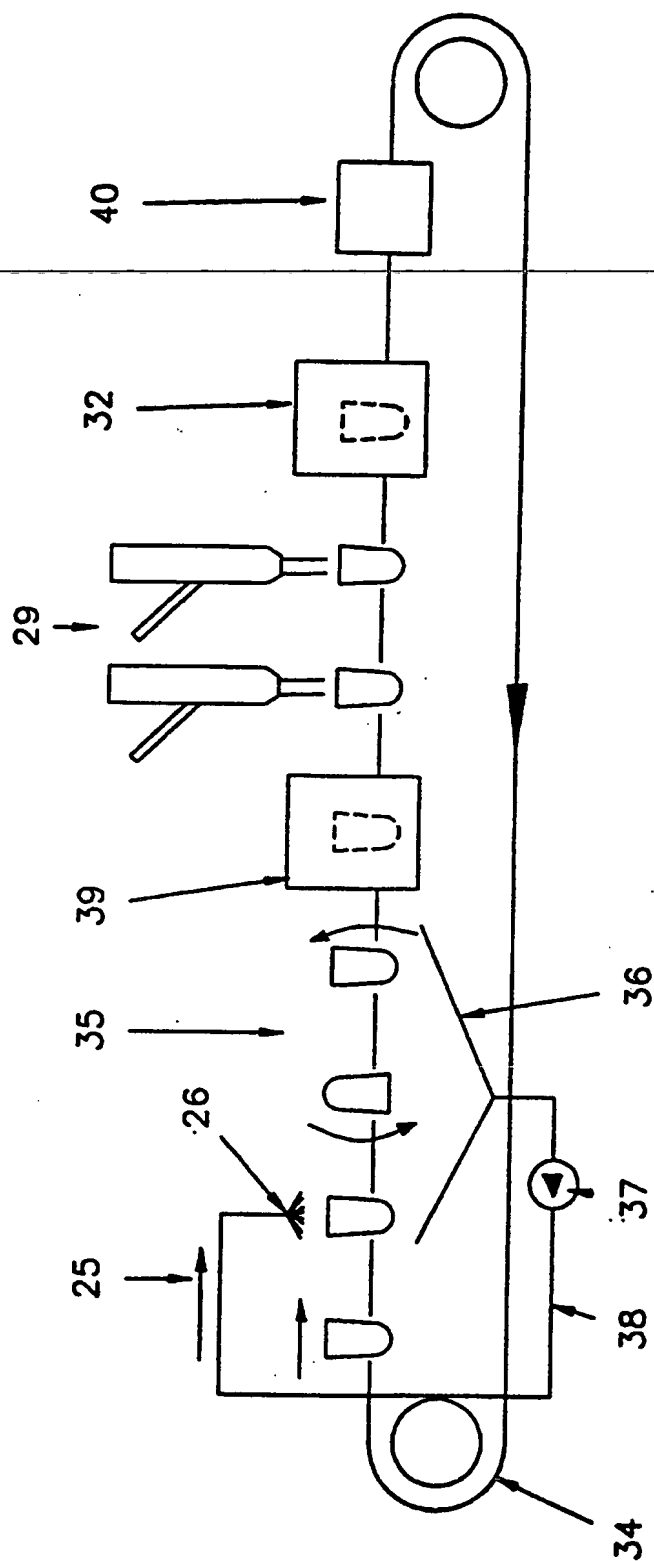
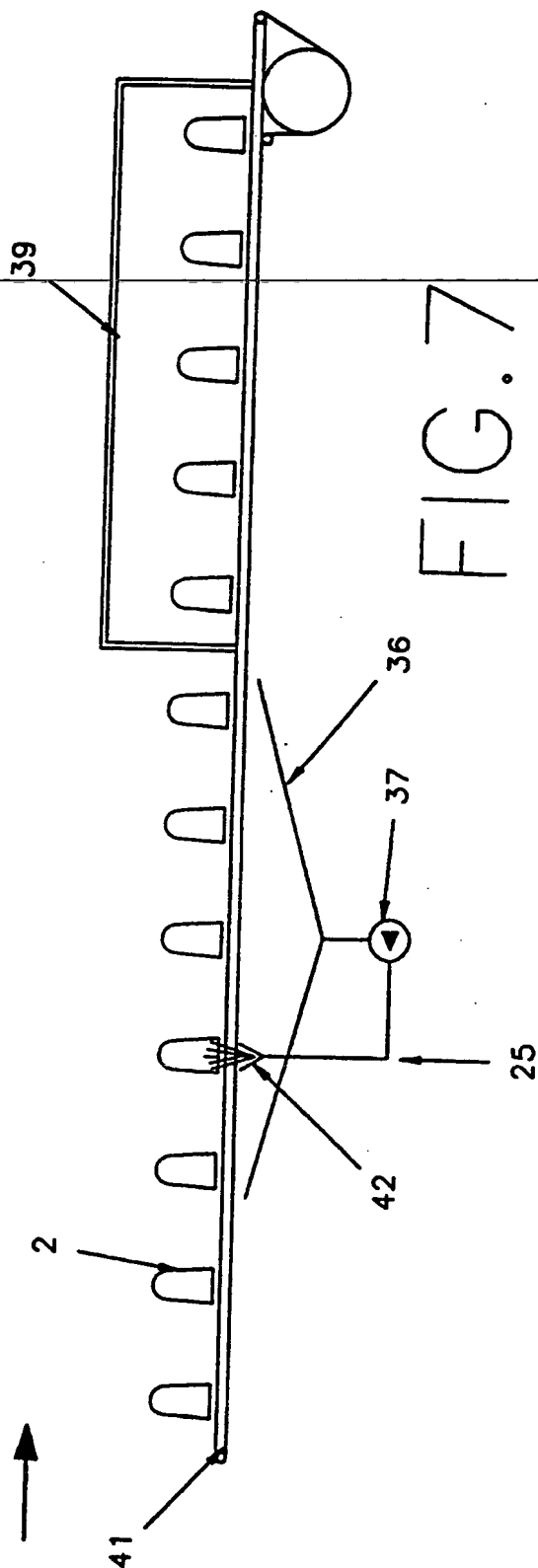


FIG. 6



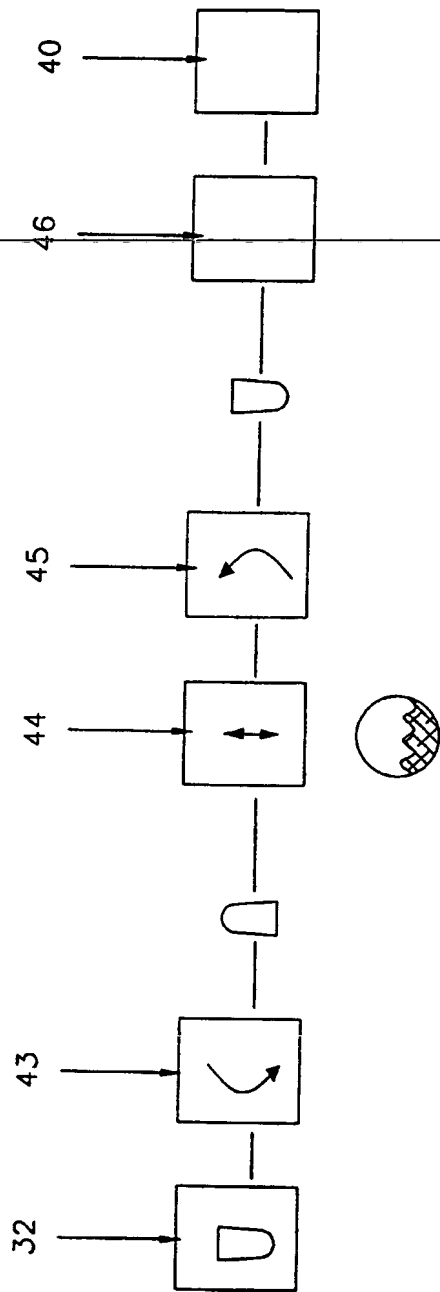
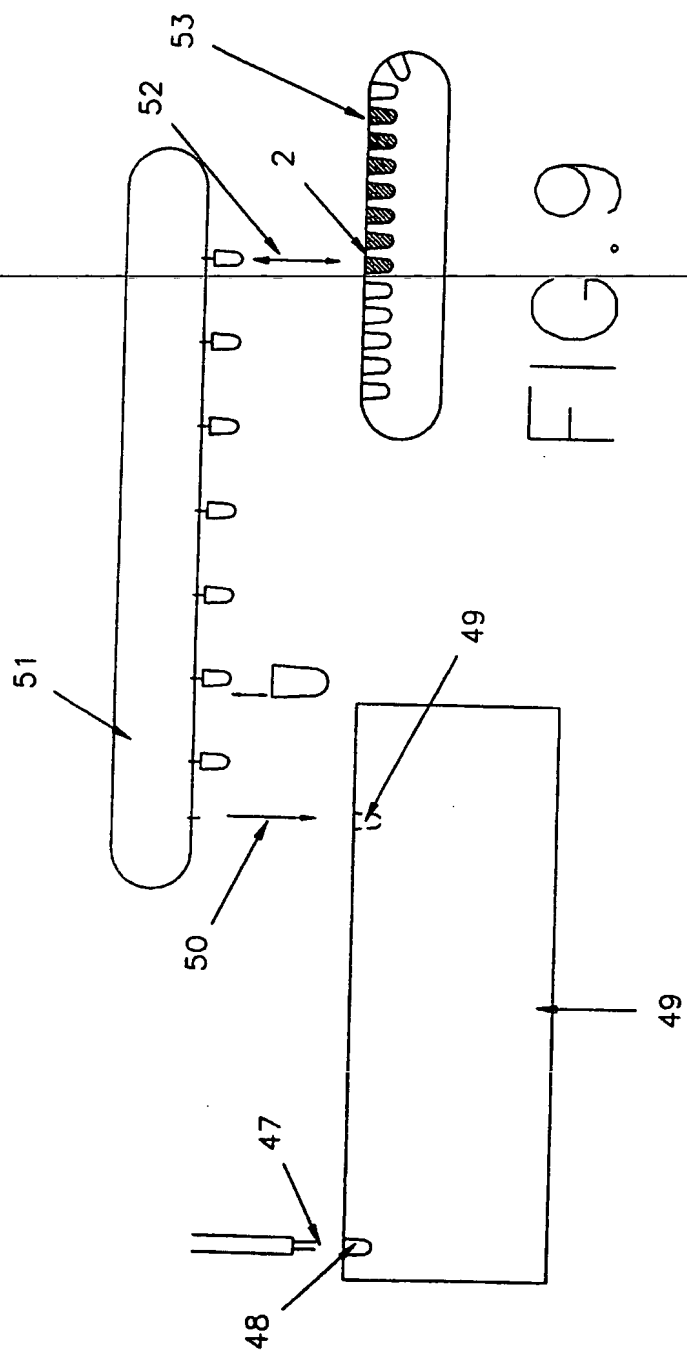


FIG. 8



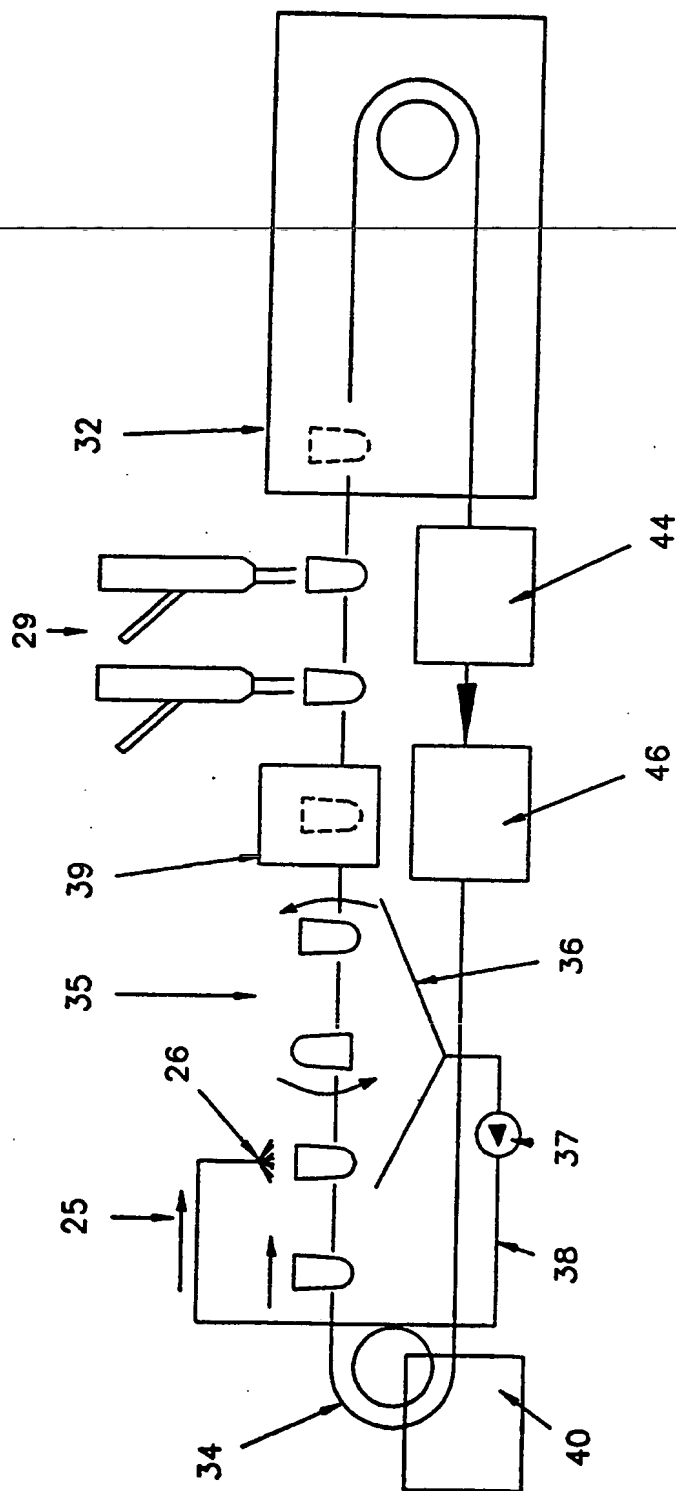


FIG. 10

INTERNATIONAL SEARCH REPORT

International application No.

PCT/DK 98/00567

A. CLASSIFICATION OF SUBJECT MATTER

IPC6: A23G 9/02, A23G 9/14, A21C 15/02, A21D 13/00, A21D 15/00
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC6: A23G, A21C, A21D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

~~SE,DK,FI,NO classes as above~~

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 1850356 A (GEORGE T. PARR), 22 March 1932 (22.03.32) --	1-3,7-16
X	US 1637556 A (JAMES DENARO), 2 August 1927 (02.08.27) --	1-3,7-16
X	WO 9300824 A1 (HENNIG-OLSEN IS A/S), 21 January 1993 (21.01.93) --	4-6
A	US 313302 S (HOWARD E. REED), 1 January 1991 (01.01.91) --	1-16

☒ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

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"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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"&" document member of the same patent family

Date of the actual completion of the international search

26 March 1999

Date of mailing of the international search report

01-04-1999

Name and mailing address of the ISA/

Swedish Patent Office

Box 5055, S-102 42 STOCKHOLM

Facsimile No. +46 8 666 02 86

Authorized officer

Eva Johansson

Telephone No. +46 8 782 25 00

International application No.

PCT/DK 98/00567

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Form PCT/ISA/210 (continuation of second sheet) (July 1992)

INTERNATIONAL SEARCH REPORT

Information on patent family members

02/03/99

International application No.

PCT/DK 98/00567

Patent document cited in search report			Publication date	Patent family member(s)	Publication date
US	1850356	A	22/03/32	NONE	
US	1637556	A	02/08/27	NONE	
WO	9300824	A1	21/01/93	AT 128326 T DE 69113472 D,T DK 547183 T EP 0547183 A,B SE 0547183 T3	15/10/95 07/03/96 19/02/96 23/06/93
				JP 6500235 T US 5322432 A	13/01/94 21/06/94
US	313302	S	01/01/91	NONE	
US	277234	S	22/01/85	NONE	